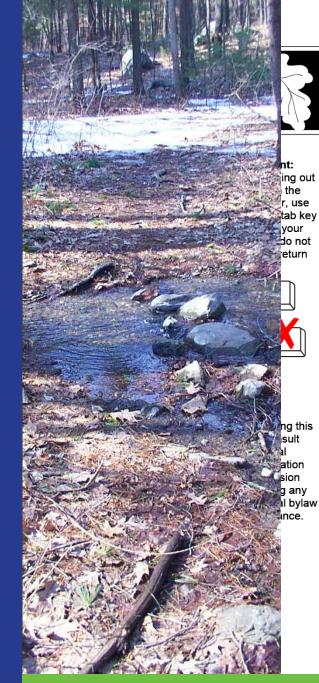
Planning

Filing

Following Through



Massachusetts Dep Bureau of Resource WPA Form

Massachusetts Wetla

A. General Inforr

Project Location (Not)

Whipple Hill Conserva. Street Address

a. Street Address

Latitude and Longitue

multiple - see narrative f. Assessors Map/Plat Nur

2. Applicant:

a. First Name

Lexington Conservat

c. Organization

1625 Massachusetts

d. Street Address

Lexington

e. City/Town

781-862-0500 x 240

h. Phone Number

Property owner (requ

Town of Lexington C

a. First Name

Town of Lexington C

c. Organization

1625 Massachusetts

d. Street Address

Lexington





Before you start

- Build a track record with nonwetland trail projects
- Look at existing examples, copy successful designs, don't reinvent the wheel
- Find a mentor who already did this
- Get friendly with your conservation administrator



Start with a solid project basis

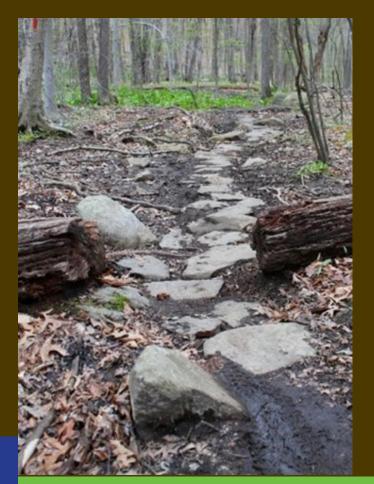
- Your project should have a net environmental benefit
- Locate your project outside of special environmental areas classified by the government (ACEC, BioMap2, NHESP, FEMA Flood Zones)
- Answer questions and objections during the planning phase, not at the public hearings
- Two principal questions the Conservation Commission (concomm) will want answered about your project
- What problems does your project address?
- How does your project solve those problems? (design characteristics)

What problems does your project address?

- Users need to be kept in a predefined space away from wetland resources to protect the environment
- Visitor safety
- Public demand for access to property acquired and maintained with their tax \$\$, leading to stronger public support for natural area preservation
- Users want to visit wetlands because they are some of the most interesting natural places
- The public is already damaging the wetland by using the property via unplanned trails
- The trail cannot be moved to avoid wetland crossings

How does your project solve problems?

- When can you get away without a boardwalk?
- How to build boardwalks that will get approved







Solutions, in order of preference

- Do nothing (wet only a few weeks, lightly used)
- Build or relocate the trail somewhere else

	Rock Paving	Boardwalk
Materials	Native on site	Hand carried in
Flexibility	Limited sites	Anywhere
Cost / linear foot	\$0	\$20
Appearance	Natural	Manmade
Installation linear feet / labor hour	0.3	2
Longevity	Infinite	25 years

Rock paving

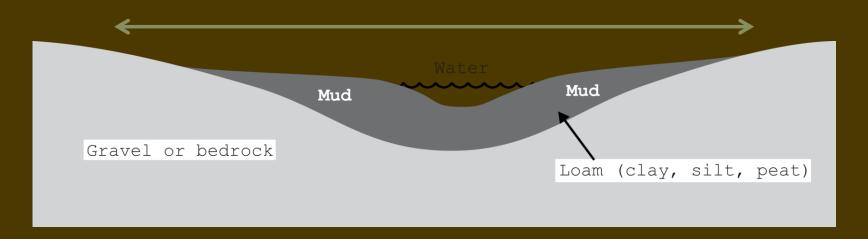
- Bumpiness can drive users off trail
- Can be difficult to build so as not to impede the natural flow of water
- Natural stepping stones in water rarely work for all users all year round, need to be supplemented





Boardwalk characteristics: Length

- Locate trail for the shortest wetland crossing
- Legal wetland boundary is usually a good extent
- Limits of worst water or mud in spring
- Review conditions over long time and varied weather
- Often end up longer than your initial estimate



Boardwalk characteristics: Width

- Visitors won't use it if too narrow
- 3 feet is comfortable for most human powered users so they stay on the structure
- Wider is called for if longer or higher structures, railings, non-human-powered users, and winter users

Boardwalk characteristics: Height

- High enough for light, water, and wildlife to pass underneath
- Annual high water varies a lot
- Over 30 inches: Needs railings (code) (Avoid!)
- Use fatter stringers to reduce overall height



Boardwalk characteristics: Foundations

- Sills or Trestles
- Smaller ground footprint is better environmentally, include footprint area in your filing







Boardwalk characteristics: General

- Build like a home deck or stronger
- Take extra care on stream banks to build on solid ground above the bank
- Make transitions to the trail smooth in all directions so the structure is always the best place to travel







Do you need a permit at all?

- Local conservation commissions and land managers vary widely in their requirements and enforcement
- Ask permission before rather than apologize later
- Be wary of land managers that casually dismiss the need for permitting

Preparation for filing

- Get written permission for your project from the land owner / manager (municipal, land trust, non-profit, private with public easement) to include in your filing
- Wetland and other permitting comes after RTP and other grant approvals (your budget may change)
- Gather written constituent support, especially relative to education of students
- Determine who is filing. Ex: DCR usually files for their properties
- Document nearby existing examples of what you propose to do



Working with cities and towns

- □ Talk to your conservation administrator she is your key source of assistance
- You are not a real estate developer or builder, you are a conservationist and friend
- Expect to be held to the same standards as developers and builders

Filing options

- Request for Determination of Applicability (RDA)
 - Negative determination means green light, usually because project is small and has net positive environmental impact, and may impose some conditions
 - Positive determination means NOI is required
- Notice Of Intent (NOI), the full filing
- Abbreviated Notice Of Intent, possible in some cases
- You can DIY, hiring a civil engineering firm is rarely necessary



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

WI A I OIII 5 - Notice of litterit

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

City/Town

Important: When filling out forms on the computer, use

A. General Information

Project Location (Note: electronic filers will click on button to locate project site):







Example project: Whipple Hill Conservation Area

- □ Town owned
- □ Recreational Trails Program (RTP) grant project
- Has a variety of terrain, wetlands, and vegetation
- Printed handouts
 - Project background and history
 - Detailed planning map
 - NOI map
- Downloads
 - NOI form
 - NOI narrative

Conservation commission field visit

- Not all concomms do these
- Requesting an informal visit prior to filing can be useful
- Have at least 2 project leaders present and prepared
- Usually helps approval by making your proposal tangible

Public hearing

- Required by law
- Abutters are formally invited
- Decision is made here
- Have at least 2 project leaders present and prepared
- May be continued, and there is an appeal period after approval, so don't schedule work tightly

Challenges

Ob	jection

Response

Trail is historic so can't change	National historic trails like the AT are improved and moved all the time
No new trails (you may encounter higher resistance than improvements to existing)	Have a good reason for building new (the Planning slides)
Wetland delineation?	The entire project is within a wetland boundary, no dispute
Looks manmade and ugly	Designed for site environment, PT wood weathers to natural gray in a few years
Needs railings	Code doesn't require if < 30"



Challenges

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Response

Strong enough for all users?	Density of users in the field is equal or less than home deck
Non-skid surfaces?	PT wood isn't very slippery, rough cut PT must be custom milled, sand paint doesn't last, nailed-on surfaces are a hazard
Avoid PT in contact with ground or no PT at all	Use recycled plastic for ground contact, other uses must be wood for strength and traction
PT / plastic sawdust?	Do cutting away from wetland or at trailhead or on tarp



Challenges

Obi	jecti	on
	, 001.	• • •

Response

Vehicles on conservation land?	Only the minimum, on suitable dirt roads
No power tools in the woods	Some necessary, handheld only, fall back to battery
Improvement will invite riffraff	Increasing legitimate visitation has the opposite effect
Make it narrower / shorter	See Planning slides, reduce project scope, but you'll be back to say "I told you so"
Silt fencing?	Site is stable at end of workday, silt fence installation creates more damage



After approval

- Finish what you said you were going to do
- Not a given, volunteers run out of steam or change lifestyle
- Solid execution will make permitting the next project easier





Lexington



Conservation Stewards

